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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,423	04/20/2004	Shuji Ichinose	740186-31	2561
22204	7590	10/03/2005	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			SUTHAR, RISHI S	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/827,423	<b>Applicant(s)</b> ICHINOSE ET AL.	
	<b>Examiner</b> Rishi Suthar	<b>Art Unit</b> 2851	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040420</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2 state that a surface hardness of the blade dowel is higher than a surface hardness of the blade arm, further including ranges for the hardness of the blade dowel and blade arm. Overlap occurs in the ranges which allows a surface hardness of the blade arm to be higher than a surface hardness of the blade dowel. It would be unclear to one skilled in the art how to choose the hardness values for the blade dowel and blade arm.

Claims 1 and 2 also state that the blade arm and blade dowel "are subject to" chemical polishing. This is indefinite because it implies that chemical polishing does necessarily have to occur in the claimed invention.

Claims 1 and 2 also state that a material of the blade dowel is a free-cutting stainless steel or a carbon tool steel. It is unclear whether these two types of materials are equal. Also, it is unclear what material of the blade dowel and blade arm the claims are referring to when they recite the limitation "a material of said blade dowel" and "a material of said blade arm".

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 understood is rejected under 35 U.S.C. 102(e) as being anticipated by Ichinose et al. (U.S. Patent Application Publication No. US 2003/0128976 A1) and Miyazaki (U.S. Patent Application Publication No. US 2004/0042787 A1).

Ichinose et al. teaches in Fig. 1 a focal plane shutter comprising: a shutter blade (1) capable of blocking a light; a blade dowel (2) attached to the shutter blade; a blade arm (5) slidably engaged with the blade dowel to open or close the shutter blade; wherein a surface hardness of the blade dowel is in the range of Hv450 to 1000, which can be higher than the range of the blade arm of Hv300 to 600; the dowel being plated with nickel, chromium, palladium or rhodium (p. 1, par. [0010]); a material of the blade dowel is SK4 material, and a material of the blade arm is SK4 material. Miyazaki teaches that it is well known that SK4 material is also known as carbon tool steel (p. 2, par. [0014]).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 as understood is rejected under 35 U.S.C. 103(a) as being obvious over Ichinose et al. (U.S. Patent Application Publication No. US 2003/0128976 A1) in view of Miyazaki (U.S. Patent Application Publication No. US 2004/0042787 A1).

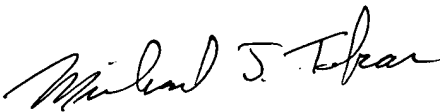
Ichinose et al. teaches in Fig. 1 a focal plane shutter comprising: a shutter blade (1) capable of blocking a light; a blade dowel (2) attached to the shutter blade; a blade arm (5) slidably engaged with the blade dowel to open or close the shutter blade; wherein a surface hardness of the blade dowel is in the range of Hv450 to 1000, which can be higher than the range of the blade arm of Hv300 to 600; the dowel being plated with nickel, chromium, palladium or rhodium (p. 1, par. [0010]); and a material of the blade dowel is SK4 material. Miyazaki teaches that it is well known that SK4 material is also known as carbon tool steel (p. 2, par. [0014]). Ichinose et al. does not teach that a material of the blade arm is made of titanium. Miyazaki teaches a focal plane shutter where the blade arms (4, 5) are made with titanium (p. 5, par. [0045]). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the material of the blade arm of Ichinose et al. to be made of titanium as taught by Miyazaki for the purpose of obtaining a higher Vickers hardness (p. 5, par. [0045]).

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***Conclusion***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS

  
**Michael Tokar**  
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